

Sample Pathway to Concurrent Bachelor of Science CIS-Information Systems and CIA-Cybersecurity & Privacy, 138 total credits **Fall 2024**

Semester 1	Semester 2	NOTES
<input type="checkbox"/> CIS 150 (4) <i>Computer Science I</i> , or (MATH 115*) <input type="checkbox"/> COMP 105 (3) <i>Writing & Rhetoric I</i> DDC GEWO <input type="checkbox"/> MATH 115 (4) <i>Calculus I</i> (MATH 105 'C-' or placement); DDC GEQT <input type="checkbox"/> CRJ 200 (3) GESB	<input type="checkbox"/> CIS 200 (4) <i>Computer Science II</i> , or (CIS 150 'C-', MATH 115) <input type="checkbox"/> MATH 116 (4) <i>Calculus II</i> (MATH 115 'C-') <input type="checkbox"/> CIS 275 (4) <i>Discrete Structures I</i> (MATH 115, CIS 200*) <input type="checkbox"/> PHIL 240 (3) GEHA	<p>The sample pathways were created with Fall and Winter semester enrollment in mind. Summer semesters can be used to lessen the workload, and/or participate in co-op or research.</p> <p>For DDC requirements, please see the University's guidelines</p> <p>Each student's pathway is unique and may differ slightly from this one</p> <p>See DDC master list for GESB/GEHA options</p>
Semester 3	Semester 4	NOTES
<input type="checkbox"/> IMSE 317 (3) <i>Probability and Statistics</i> (MATH 116) <input type="checkbox"/> CIS 316 (3) <i>Practical Aspects Comp Security</i> (CIS 200 'C-') <input type="checkbox"/> CIS 350 (4) <i>Data Structures</i> (MATH 115, CIS 200 'C-', CIS 275) <input type="checkbox"/> MATH 227 (3) <i>Intro to Linear Algebra</i> (Math 116 'C-') <input type="checkbox"/> DDC Course (3) GEHA	<input type="checkbox"/> CIS 310 (4) <i>Assembly Language</i> (MATH 115, CIS 200, CIS 275) <input type="checkbox"/> COMP 270 (3) <i>Technical Writing</i> (COMP 105 or placement); DDC GEWO <input type="checkbox"/> CIS 421 (4) <i>Database Mgmt Systems</i> (CIS 350) <input type="checkbox"/> Lab Science Sequence I (4) Choose from: BIOL 130, GEOL 118, CHEM 134, PHYS 125, PHYS 150; DDC GENS <input type="checkbox"/> IMSE 3005 Fall (4) <i>Operations Research</i> (MATH 227, IMSE 317*)	<p>Approved Electives: 8 credits required</p> <p>Cannot be the same courses counted towards your concentration:</p> <p>CIS 285 (3), CIS 316 (3), CIS 376 (4), CIS 381 (4), CIS 387 (4), CIS 411 (3), CIS 412 (3), CIS 436 (3), CIS 437 (3), CIS 439 (3), CIS 446 (3), CIS 447 (3), CIS 449 (3), CIS 467 (4), CIS 482 (3), CIS 487 (3), CIS 4851 (3), CIS 489 (3), ENGR 399 (1), ENGR 492 (1-3), ENGR 493 (1-3)</p>

* denotes a corequisite course

Courses listed in parentheses () are prerequisites for the listed course

Semester 5	Semester 6	NOTES
<ul style="list-style-type: none"> <input type="checkbox"/> CIS 450 (4) <i>Operating Systems</i> (CIS 310, CIS 350, IMSE 317*) <input type="checkbox"/> Lab Science Sequence II (4) Choose from same subject area as Sequence I: BIOL 320, GEOL 218, CHEM 136, PHYS 126, PHYS 151; DDC GENS <input type="checkbox"/> CIS 375 (4) <i>Software Engineering I</i> (COMP 270, CIS 350) <input type="checkbox"/> CIS 447 Fall (3) <i>Comp Network Security</i> (CIS 450*) 	<ul style="list-style-type: none"> <input type="checkbox"/> CIS 427 (4) <i>Comp Networks</i> (IMSE 317, CIS 350) <input type="checkbox"/> MATH 396 Winter (3) <i>Intro to Cryptography</i> (MATH 227 'C-') <input type="checkbox"/> CRJ 409 (3) <i>Intelligence and Homeland Security</i> (CRJ 200) <input type="checkbox"/> CIS 449 Winter (3) <i>Dig Content Protection</i> (CIS 350), or ECE 427 (4) <i>Digital Content Protection</i> (CIS 447) 	<p>A course may have multiple requirements; however, credit is only applied once. Using one course to multiple requirements may result in a deficiency in total credits.</p>
Semester 7	Semester 8	NOTES
<ul style="list-style-type: none"> <input type="checkbox"/> CIS 425 Fall (4) <i>Information Systems</i> (CIS 375, CIS 421*) <input type="checkbox"/> CIS 435 Fall (3) <i>Web Technology</i> (CIS 375*) <input type="checkbox"/> CIS 296 Fall (3) <i>Java</i>, or CIS 297 Winter (3) <i>Intro to C#</i>, or CIS 298 Winter (3) <i>Intro to Python</i> (CIS 200) <input type="checkbox"/> CIS 4851 Fall (3) <i>Data Security and Privacy</i> (CIS 200) 	<ul style="list-style-type: none"> <input type="checkbox"/> ACC 298 (3) <i>Financial Accounting</i> (MATH 105, 25 credits) <input type="checkbox"/> OB 354 (3) <i>Organizational Behavior</i> (55 credits); DDC GESB <input type="checkbox"/> CIS 446 Winter (3) <i>Wireless and Mobile Computing Security</i> (CIS 200) <input type="checkbox"/> CIS 479 (3) <i>Artificial Intelligence</i> (CIS 350); DDC GEIN 	

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Semester 9	Semester 10	NOTES
<input type="checkbox"/> CIS 4951 (2) <i>Senior Design I</i> (CIS 310, CIS 375, CIS 450 and CIS 427) <input type="checkbox"/> CIS 476 (3) <i>Software Architecture and Des Patterns</i> (CIS 375) <input type="checkbox"/> CIS Elective (4) See individual courses for prereqs <input type="checkbox"/> ECON 201 (3) <i>Macroeconomics</i> , or ECON 202 (3) <i>Microeconomics</i> (MATH 105 recommended); DDC GESB	<input type="checkbox"/> CIS 4952 (2) <i>Senior Design II</i> (CIS 4951) <input type="checkbox"/> ENGR 400 (3) <i>Applied Business Technique</i> (86 credits), or ENT 400 (3) <i>Entrepreneurship</i> (55 credits); DDC GEIN <input type="checkbox"/> CIA Elective (4) See individual courses for prereqs	

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